

PR2



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,863	05/14/2001	Reinhold Geiselhart	DE920000017US1	1179

36491 7590 07/27/2004

KUNZLER & ASSOCIATES  
8 EAST BROADWAY  
SALT LAKE CITY, UT 84111

EXAMINER
----------

LU, KUEN S

ART UNIT	PAPER NUMBER
----------	--------------

2177

DATE MAILED: 07/27/2004

16

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/855,863

Applicant(s)

GEISELHART, REINHOLD

Examiner

Kuen S Lu

Art Unit

2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 12-23 and 28-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12-23 and 28-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/5-14-2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: IDS 10/2-1-2004.

***Supplemental – Non-Final***

***DETAILED ACTION***

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 13-14, 17-18 and 29-32 are rejected under 35 U.S.C. 102(b) as anticipated by Thomas (U.S. Patent 6,401,118).

As per Claims 1, 13 and 17, Thomas teaches the following:

“gathering context information from the documents” at col. 9, lines 8-13 where the downloaded pages are scored (i.e. ranked) based on the search criteria. Each page is scored based on a text search of keywords from the search criteria and statistics accumulated from analyzing the pages;

“presenting the context information to a user” at col. 10, lines 51-52 where best page scored is presented to the user;

“gathering at least one rank criterion from the user for the context information” at Fig. 3, step 304 and col. 6, lines 33-34 where a user defines the search criteria; and

"ranking the documents, based at least in part on the at least one rank criterion" at col. 9, lines 8-13 where the downloaded pages are scored (i.e. ranked) based on the search criteria. Each page is scored based on a text search of keywords from the search criteria and statistics accumulated from analyzing the pages.

As per Claims 2, 14 and 18, Thomas teaches "revising the at least one rank criterion, in response to user input and re-ranking the documents based on the revised at least one rank criterion" at col. 10, lines 55-65 where the retrieved set of documents is prioritized by user and a re-ranked refinement set is created.

As per Claims 29 and 31, Thomas teaches "user preferences comprise a plurality of rating levels" at col. 10, lines 55-65 where the user prioritizes the retrieved set of documents is a human preference intervention and re-ranking step with optional priority levels.

As per Claims 30 and 32, Thomas teaches "the documents are ranked without communicating with a search engine that located the documents" at col. 9, lines 8-10 where locally downloaded pages are scored (i.e. ranked) which suggests a further communicating with a search engine that located the documents is not needed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (U.S. Patent 6,401,118), as applied to claims 1-2, 13-14, 17-18 and 29-32 above, and in view of Schuetze (U.S. Patent 5,675,819).

As per claims 3, 15 and 19, Thomas teaches gathering and presenting context information and further gathering criteria to rank retrieved information as previously described in claims 1-2, 13 and 17 rejection under 35 U.S.C. 102.

Thomas does not specifically teach extracting lexical affinities from the documents.

However, Schuetze teaches determining and extracting lexical co-occurrence of terms at col. 6, lines 5-8 and 20-25.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to include Schuetze's teaching Thomas' because both references are devoted to improve accuracy of retrieving documents. The combination of the references would have improved overall precision of information system for precisely retrieving relative documents from a corpus of documents.

3. Claims 4, 5, 1/2/4/6, 1/2/5/6, 1/2/6, 1/6, 1/2/4/6/7, 1/2/5/6/7, 1/2/6/7, 1/6/7, 16, 20, 21, 17/20/22, 17/21/22, 17/18/22, 17/22, 17/20/22/23, 17/21/22/23, 17/18/22/23 and 17/22/23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (U.S. Patent 6,401,118), as applied to claims 1-2, 13-14, 17-18 and 29-32 above, and further in view of Marchisio (U.S. Pub. 2002/0156763).

As per Claims 4 and 20, Thomas teaches gathering and presenting context information and further gathering criteria to rank retrieved information as previously described in claims 1-2, 13 and 17 rejection under 35 U.S.C. 102.

Thomas does not specifically teach "features extraction".

However, Marchisio teaches at Fig. 3, elements 31-39, col. 6-7, [0065], lines 1-20.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to include Marchisio's teaching on features extraction with Thomas' for providing additional functions such as detecting acronyms and recognizing specific HTML, SGML or XML tags to the users of Thomas' system.

As per claims 5 and 21, Thomas teaches gathering and presenting context information and further gathering criteria to rank retrieved information as previously described in claims 1-2, 13 and 17 rejection under 35 U.S.C. 102.

Thomas does not specifically teach "extracting word frequency statistics from the documents".

However, Marchisio teaches "gathering context information comprises extracting lexical affinities from the documents" at col. 4, [0034], lines 18-20.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to include Marchisio's teaching on calculating word frequency with Thomas' document retrieval system. The teaching would have enabled Thomas' system to count the occurrences of individual search terms. Based on the statistics, the system would have allowed users to identify the higher hit search terms for improving the search syntax.

As per claims 1/2/4/6, 1/2/5/6, 1/2/6, 1/6, 16, 17/20/22, 17/21/22, 17/18/22, 17/22, Thomas teaches gathering and presenting context information and further gathering

criteria to rank retrieved information as previously described in claims 1-2, 13 and 17 rejection under 35 U.S.C. 102.

Thomas does not specifically teach "weighting of the context information by a weighting function".

However, Marchisio does at col. 3, [0031], line 4 through [0032], line 14.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Marchisio's reference with Thomas' because both are devoted to improve the performance of document retrieval. Measuring the similarity between query and document searching vectors through weighting function is a tool allow users of Thomas' system to better sense the relative importance of the terms used in the document search and retrieval.

As for claims 1/2/4/6/7, 1/2/5/6/7, 1/2/6/7, 1/6/7, 17/20/22/23, 17/21/22/23, 17/18/22/23 and 17/22/23, Marchisio teaches "utilizing discrete ranking levels in said weighting step" at Fig. 1, steps 12-13 and col. 8, lines 7-19 where the weighting step sorting document weights based on a predetermined ordering, such as in decreasing order of similarity to the user query.

4. Claims 12 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (U.S. Patent 6,401,118) as applied to claims 1-2, 13-14, 17-18 and 29-32 above, and further in view of Fagin et al. (U.S. Patent 6,014,664).

As per claims 12 and 28, Thomas teaches gathering and presenting context information and further gathering criteria to rank retrieved information as previously described in claims 1-2, 13 and 17 rejection under 35 U.S.C. 102.

Thomas does not specifically teach increasing the weight of higher rankings or decreasing the lower ones in order to increase the distance between the ranking scores.

However, Fagin specifically and clearly teaches scoring function, weighting rule, weighting adjustment and combined scoring functions, among others, through columns 9, 10 and 11.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Fagin's reference with Thomas' because both are devoted to improve the accuracy and relevance of query terms such that more desired and only the highest ranked documents would have been retrieved. Combining the two teachings would have allowed users to enter more flexible queries and obtained highly re-ranked, but a smaller set of documents.

5. Claims 1/2/3/6, 17/18/19/22, 1/2/3/6/7 and 17/18/19/22/23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas (U.S. Patent 6,401,118) in view of Schuetze (U.S. Patent 5,675,819), as applied to claims 3, 15 and 19 above, and further in view of Marchisio (U.S. Pub. 2002/0156763).

As per Claims 1/2/3/6 and 17/18/19/22, the combined Schuetze-Thomas reference teaches extracting lexical affinities from information as previously described for claims 3, 15 and 19 rejection.

The combined Schuetze-Thomas reference does not specifically teach "weighting of the context information by a weighting function".

However, Marchisio does at col. 3, [0031], line 4 through [0032], line 14.



It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Marchisio's reference with Thomas' because both are devoted to improve the performance of document retrieval. Measuring the similarity between query and document searching vectors through weighting function is a tool allow users of Thomas' system to better sense the relative importance of the terms used in the document search and retrieval.

As per Claims 1/2/3/6/7 and 17/19/22/23, Marchisio teaches "utilizing discrete ranking levels in said weighting step" at Fig. 1, steps 12-13 and col. 8, lines 7-19 where the weighting step sorting document weights based on a predetermined ordering, such as in decreasing order of similarity to the user query.

***Response to the Arguments***

6. Applicant's arguments with respect to claims 1-7, 12-23 and 28-32 have been considered but are moot in view of the new ground(s) of rejection.

7. The prior art made of record

H. U.S. Patent No. 6,401,118

C. U.S. Patent No. 5,675,819

D. U.S. Patent No. 6,714,929

E. U.S. Patent No. 6,014,664

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. U.S. Publication 2002/0123994

B. U.S. Patent No. 6,510,406

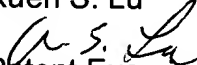
F. U.S. Patent No. 5,933,822

G. U.S. Patent No. 6,473,751

The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is (703) 305-9601 for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuen S Lu whose telephone number is 703-305-4894. The examiner can normally be reached on 8 AM to 5 PM, Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Kuen S. Lu  
  
Patent Examiner

July 15, 2004

  
Alford W. Kindred

Primary Examiner

July 15, 2004